

Claims 1-16 Cancelled

17. (New) Use of an effective amount of an isolated monoclonal antibody that specifically binds to a polypeptide comprising the sequence set forth in SEQ ID NO: 4 in the manufacture of a medicament for treatment of a hematological malignancy in a mammalian subject.

18. (New) Use of an effective amount of an isolated monoclonal antibody that specifically binds to a polypeptide comprising the sequence set forth in SEQ ID NO: 56 in the manufacture of a medicament for treatment of a hematological malignancy in a mammalian subject.

19. (New) The use of claim 17, wherein the hematological malignancy is associated with overexpression of BCMA.

20. (New) The use of claim 18, wherein the hematological malignancy is associated with overexpression of GPRC5D.

21. (New) The use of claim 17 or 18, wherein said antibody is a humanized antibody.

22. (New) The use of claim 17 or 18, wherein said antibody is a chimeric antibody.

23. (New) The use of claim 17 or 18, wherein said antibody is a Fab fragment.

24. (New) The use of claim 17 or 18, wherein said antibody is a Fv fragment.

25. (New) The use of claim 17 or 18, wherein said antibody is a scFv.

26. (New) The use of claim 17 or 18, wherein said antibody further comprises a therapeutic moiety.

27. (New) The use of claim 26, wherein the therapeutic moiety is a radionuclide.

28. (New) The use of claim 27, wherein the radionuclide is a member selected from the group consisting of:  $^{90}\text{Y}$ ,  $^{123}\text{I}$ ,  $^{125}\text{I}$ ,  $^{131}\text{I}$ ,  $^{186}\text{Re}$ ,  $^{111}\text{At}$ , and  $^{212}\text{Bi}$ .

29. (New) The use of claim 17 or 18, wherein the hematological malignancy is selected from the group consisting of: a B cell lymphomas, a B cell leukemia, multiple myeloma, and combinations thereof.

30. (New) The use of claim 17 or 18, wherein the hematological malignancy is chronic lymphocytic leukemia.

31. (New) The use of claim 17 or 18, wherein the hematological malignancy is multiple myeloma.

32. (New) The use of claim 17 or 18, wherein the mammalian subject is a human.

33. (New) The use of claim 17 or 18, wherein the administration is intravenous.

34. (New) A method for the detection of a hematological malignancy in a patient, said method comprising:

(a) contacting a biological sample from the patient with a monoclonal antibody that specifically binds to a polypeptide comprising the sequence set forth in SEQ ID NO: 4, whereby said monoclonal antibody forms a complex with a polypeptide comprising the sequence set forth in SEQ ID NO:4; and

(b) detecting the amount of said complex, thereby detecting cancer in said patient.

35. (New) A method for the detection of a hematological malignancy in a patient, said method comprising:

(a) contacting a biological sample from the patient with a monoclonal antibody that specifically binds to a polypeptide comprising the sequence set forth in SEQ ID NO: 56,

whereby said monoclonal antibody forms a complex with a polypeptide comprising the sequence set forth in SEQ ID NO:56; and

(b) detecting the amount of said complex, thereby detecting cancer in said patient.

36. (New) The method of claim 34 or 35, wherein the hematological malignancy is selected from the group consisting of: a B cell lymphoma, a B cell leukemia, and multiple myeloma, and combinations thereof.

37. (New) The method of claim 34 or 35, wherein the hematological malignancy is chronic lymphocytic leukemia.

38. (New) The method of claim 34 or 35, wherein the hematological malignancy is multiple myeloma.

39. (New) An isolated monoclonal antibody that specifically binds to a polypeptide comprising the set forth in SEQ ID NO: 4.

40. (New) An isolated monoclonal antibody that specifically binds to a polypeptide comprising the set forth in SEQ ID NO: 56.

41. (New) A nucleic acid encoding the monoclonal antibody of claim 39 or 40.

42. (New) A pharmaceutical composition comprising a monoclonal antibody according to claim 39 or 40 and a pharmaceutically acceptable carrier.

43. (New) The monoclonal antibody of claim 39 or 40, wherein said antibody is a humanized antibody.

44. (New) The monoclonal antibody of claim 39 or 40, wherein said antibody is a chimeric antibody.

45. (New) The monoclonal antibody of claim 39 or 40, wherein said antibody is a Fab fragment.

46. (New) The monoclonal antibody of claim 39 or 40, wherein said antibody is a Fv fragment.

47. (New) The monoclonal antibody of claim 39 or 40, wherein said antibody is a scFv.

48. (New) The monoclonal antibody of claim 39 or 40, further comprising a reporter group.

49. (New) The monoclonal antibody of claim 39 or 40, further comprising a therapeutic moiety.

50. (New) The monoclonal antibody of claim 49, wherein the therapeutic moiety is a radionuclide.

51. (New) The monoclonal antibody of claim 50, wherein the radionuclide is a member selected from the group consisting of:  $^{90}\text{Y}$ ,  $^{123}\text{I}$ ,  $^{125}\text{I}$ ,  $^{131}\text{I}$ ,  $^{186}\text{Re}$ ,  $^{111}\text{At}$ , and  $^{212}\text{Bi}$ .

52. (New) A kit for detecting a hematological malignancy cell, said kit comprising:

a monoclonal antibody that specifically binds to a polypeptide comprising the sequence set forth in SEQ ID NO: 4; and  
instructions for use.

53. (New) A kit for detecting a hematological malignancy cell, said kit comprising:

a monoclonal antibody that specifically binds to a polypeptide comprising the sequence set forth in SEQ ID NO: 56; and  
instructions for use.